then to system 70, it includes a transmitter 72 and a receiver 74. Transmitter 72 and receiver 74 in some respects are comparable to system 10 described earlier; thus, to simplify the present discussion the comparable blocks are shown with a like reference identifier, with the addition of an apostrophe to the identifier in Figure 3 so that certain blocks may be referred to with respect to system 70 without causing a confusing reference as to the earlier prior art system 10. Additionally, the comparable blocks are discussed to a lesser extent below given the previous discussion as well as the skill in the art. Finally, as a multiple antenna system, in the illustrated example two transmit and two receive antennas are illustrated. However, the present inventive teachings may be extended to various systems with $P$ transmit antennas and $Q$ receive antennas.

Rewrite the paragraph at page 24, line 3 as follows.

**[0045]** Compute combined effective channel block 86 determines the product of the matrices it receives from blocks 82 and 84 (unless that product was already determined due to the inclusion of the pilot and data in the same channel as discussed above with respect to channel estimator 82). To perform this operation, recall that $\mathbf{V}^{(n)}$ basis selector block 84 communicates to block 86 each value of $\mathbf{V}^{(n)}$ and, therefore, this includes the immediately previous value of $\mathbf{V}^{(n)}$ that it fed back to transmitter 72 (i.e., $\mathbf{V}^{(n)}(t\text{-}1)$). In response, block 86 determines the product of $\hat{\mathbf{H}}$ and $\mathbf{V}^{(n)}$(t-1), where the designation of this product is simplified in the remaining discussion by dropping the temporal aspect of ($t$-1) and hence, is referred to as $\left(\hat{\mathbf{H}}\mathbf{V}^{(n)}\right)$. Further, this product, or its conjugate transpose, $\left(\hat{\mathbf{H}}\mathbf{V}^{(n)}\right)^{\mathrm{H}}$, is output by block 86 to matched filter 80, which uses this product to solve for the vector $\underline{y}$ in Equation 27 described above.

Rewrite the paragraph of Equation 37 at page 27, line 17 as follows.

$$\phi_m = \frac{2\pi}{M}(m-1) \quad , \quad m=1,2,\ldots,M \qquad \text{Equation 37}$$

Rewrite the paragraph at page 33, line 13 as follows.

**[0060]** Figure 4 illustrates an electrical block diagram of a double space time block coded transmit antenna diversity ("DSTTD") system 100 according to another preferred embodiment. Like Figure 3, since Figure 4 represents an electrical and functional block diagram, one skilled in the art may ascertain various technical manners of implementing system 100 into a combination of hardware and software, including the preferred use of a digital signal processor to include at least some of the illustrated blocks. Turning then to system 100, and by way of introduction, STTD technology in general is known in the art. Indeed, for further aspects that could be incorporated in such a system, the reader is invited to review the following two patent applications, both of which are hereby incorporated herein by reference: (i) U.S. Patent Application 09/578,004 (docket TI-29286), filed May 24, 2000; and (ii) U.S. Patent Application 09/885,878 (docket TI-31293), filed June 20, 2001. In system 100, it includes a transmitter 102 and a receiver 104. In some respects, transmitter 102 and receiver 104 are comparable to transmitter 72 and receiver 74 of system 70 described earlier and, thus, to simplify the present discussion the comparable blocks are shown with a like reference identifier and are generally not discussed once more so as to simplify the remaining discussion. DSTTD system 100 is also a multiple antenna system with $P$ transmit antennas and $Q$ receive antennas, where in such a system $Q$ can be larger than $P$; in the example of Figure 4, therefore, $P$=4 so that transmit antennas $TAT_1$" through $TAT_4$" are shown, and $Q$ is a larger number so that receive antennas $RAT_1$" through $RAT_Q$ are shown.